Wayne J. Oliver

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A Management Consultant/Economist with a diverse background in the energy field. Areas of expertise include power procurement and contracting, strategic planning, asset valuation, power project evaluation, energy supply/demand forecasting and planning, competitive fuels analysis, risk management, rate analysis and expert testimony, regional energy market analysis, and project economic and financial analysis. Focus on electric, gas and renewable resource industries. Provided expert testimony at the Federal Energy Regulatory Commission, National Energy Board of Canada, and in over 10 states and Canadian Provinces in nearly 50 proceedings.

PROFESSIONAL EMPLOYMENT

2000-present	Merrimack Energy Group, President
1988-2000	Reed Consulting Group/Navigant Consulting, Inc. Managing Director/Senior Vice President/Founder of Reed
1999	Babson College, Adjunct Professor, Finance Department
1984-1988	R.J. Rudden Associates, Inc. Senior Consultant
1983-1984	Massachusetts Executive Office of Energy Resources Consultant
1981-1983	Algonquin Gas Transmission Company Corporate Planner
1980-1981	Massachusetts Executive Office of Energy Resources Analysis and Regulations Program Assistant Director
1978-1980	New England Regional Commission Energy Policy Analysis Program Coordinator/Senior Economist

PROFESSIONAL EXPERIENCE

Power Procurement/Competitive Bidding

Managed over 100 power procurement assignments since 1989 in 20 states and 3 Canadian Provinces. Served as Independent Evaluator or Independent Consultant for over 75 competitive procurement assignments on behalf of utilities, regulatory agencies and public organizations, serving as Independent Evaluator or in a similar function. As Independent Evaluator responsible to ensure the competitive procurement process is undertaken in a fair and unbiased manner. Assisted a number of utilities in the development and implementation of competitive bidding processes and associated RFPs for long-term supply-side resources, renewable resources, option contracts, distributed resources and demand-side

resources. Evaluated hundreds of power supply proposals for a wide range of power generation technology options and contract structures.

Directed a major study for a large electric utility involving the development of a viability methodology for assessing non-utility generation projects. The approach involved the use of Critical Path methodology to assess project status and probability of success

Independent Evaluator or Independent Monitor for a number of power solicitation or competitive bidding processes including: Entergy Services, Inc., Southern California Edison, Pacific Gas & Electric, San Diego Gas & Electric Company, State of Utah/PacifiCorp RFPs, Arizona Public Service Company, Avista Utilities, Delmarva Power, El Paso Electric, Baltimore Gas and Electric, Duke Power, Hydro-Quebec (Baseload and Dispatchable Supply, Wind, Biomass, Cogeneration, and several Short-Term Call for Tenders), Portland General Electric, BC Hydro, Central and SouthWest Services (five separate RFPs), Commonwealth Edison, Public Service Company of Oklahoma and Southwestern Electric Power Company RFPs for power supplies.

Assisted Hawaiian Electric with the company's policy associated with the design of competitive procurement rules in Hawaii. Testified for four days on industry practices associated with competitive procurement processes.

Project Manager responsible for designing and developing supply side RFPs for several electric utilities including Boston Edison, Central and South West Services, Inc., Commonwealth Edison Company, Duke Power, Carolina Power & Light, and Hydro-Quebec.

Assisted in the preparation of power supply bids on behalf of utility and non-utility clients for a number of utility solicitations.

Assisted several utilities with the design and development of an evaluation methodology and development of contract terms for RFP's for Power Options. Managed the development of an options pricing model to evaluate bids received.

Renewable Resources

Developed renewable resource RFPs and assisted in bid evaluation for Hydro-Quebec Distribution (1000 MW Wind and 100 MW Biomass), Avista Utilities, Massachusetts Technology Collaborative, Portland General Electric (wind, geothermal, and biomass proposals), Central Power & Light Company (wind only RFP), Public Service Company of Oklahoma, Southwestern Electric Power Company, West Texas Utilities, and Hawaiian Electric Company. Served as Independent Evaluator for several renewable resource solicitations including Pacific Gas & Electric, Arizona Public Service, and PacifiCorp.

Chaired two major conferences on green pricing initiatives and renewable resource development

Asset Valuation

Conducted due diligence analysis for several banks regarding the potential financing for merchant power projects, gas storage projects, and gas pipeline assets.

Conducted asset valuation analysis for utilities and power generators interested in acquiring power generation assets. Analysis included valuation of gas-fired combined cycle and CTs, coal projects, hydroelectric facilities, power contracts, pipeline capacity commitments, and electric transmission assets.

Competitive Energy Pricing

Negotiated several special contracts with unique pricing arrangements between utilities and customers.

Developed a market price evaluation methodology and pricing process for a large electric utility for wholesale and retail marketing initiatives.

Developed approach for resource procurement in a competitive electric market based on portfolio design, which incorporates short and long term resources, flexible contract provisions and option pricing concepts.

Risk Management

Conducted seminars for utilities on the use of risk management techniques and financial derivatives to hedge risks, including the use of options, futures and swaps. Applied financial option techniques in the development of physical option arrangements.

Developed a risk management strategy for a major electric utility to hedge its fuel and power trading price risk.

Fuel Supply Acquisition Strategy and Procurement

Assisted several LDCs and electric utilities with gas procurement activities including direct purchases from suppliers. Activities included development of a supply portfolio plan, design of an RFP for gas supplies, assessment of the need for price and nomination flexibility for contracting, development of the evaluation criteria, and review and evaluation of proposals submitted. Participated in RFP's for both U.S. and Canadian supplies. Responsible for the evaluation of over 100 proposals for gas supply.

Assisted independent power producers and cogenerators with development of fuel purchase strategies, and implementation of the strategy including identifying producers, suggesting a course of action and negotiation of the fuel purchase contracts and transportation pricing terms and conditions.

Completed gas procurement strategies and portfolio designs for several electric utilities. Responsibilities included evaluating pipeline and storage options, developing a procurement strategy, and recommending a course of action. The projects involved integrating the production cost and operations of the generation units with gas supply and transportation contracting considerations to develop a least cost strategy.

Energy Market and Economic Policy Studies

Conducted a number of studies for utility and non-utility clients on the market for power in various regions of the US and in Canada.

Directed merchant power study for an Independent Power Producer assessing the market price of power for the uncommitted capacity from the project as a form of merchant power. Study components included analysis of the competitive market price in both the short and long term, definition of need for capacity and energy, risk assessment of key market factors, and project dispatch analysis.

Assisted in the completion of a gas market study for a proposed natural gas pipeline project assessing the potential of the Northeast market for Canadian gas.

Conducted several market studies and power price forecasts in support of due diligence efforts for acquisition of power generation assets.

Utility Restructuring

Managed several projects for electric and gas utilities on industry restructuring and unbundling initiatives.

Presented seminars to utilities, trade organizations and conferences on electric utility restructuring strategies and implementation.

Advised senior management of electric utilities on evaluating and developing strategies for enhancing the value of the utility's assets. Also assisted several utilities in the development of GENCO strategies.

Strategic Planning and Analysis

Assisted in a strategic planning study for a major international coal company with the goal of developing strategies to increase market share within the electric power industry.

Completed a strategic planning study for a major electric utility assessing the opportunities for the company in the changing natural gas market, including fuel purchasing strategies, and gas fired cogeneration and combined cycle opportunities.

Prepared economic forecasts and strategic plans for a gas transmission company.

Conducted several seminars for senior management of pipeline companies and electric utilities on opportunities and challenges for gas use in electric generating facilities.

Assisted several local gas distribution companies with development and implementation of gas supply/transportation procurement strategies in response to FERC Order No. 636.

Forecasting and Modeling

Managed the development of a monthly demand forecasting model for each rate class for LDCs using both econometric and end-use modeling techniques as part of its integrated resource planning process.

Developed integrated planning and forecasting system for a small electric utility. The system was comprised of production cost, generation planning, cost of service, demand forecasting and rate design modules.

Assisted in econometric research study of the capital structure of a large combination utility.

Developed an electric rate forecasting model integrating production cost projections with a cost-of-service model for a large industrial client for purposes of projecting the electricity costs for the utility over a five-year time horizon.

Managed a number of projects and utilized several production cost and generation expansion models for evaluation of power supply proposals and resource options.

Cost of Service/Rate Design

Submitted testimony before the Federal Energy Regulatory Commission on pipeline rate and cost allocation issues in Penn York Energy Corporation and Great Lakes Gas Transmission Limited Partnership rate cases.

Replicated and critiqued several electric and gas cost of service models for rate case intervention dealing with cost allocation, revenue requirements and rate design issues.

Financial Analysis

Assisted several utilities in the financial analysis of distributed resources for the purposes of establishing a DG business unit.

Assisted in the preparation of financial and economic feasibility studies of power generation projects for a consortium of banks.

Prepared several financial prefeasibility studies of proposed power generation projects for utilities, independent power producers and industrials.

Directed several studies on power needs and competitive costs of power supply options for large independent power producers for project applications before regulatory authorities.

EDUCATION

Northeastern University, Completed Doctoral Course work, Economics, 1977 Northeastern University, M.A., 1976 Assumption College, B.A., 1973

OTHER

Past Chairman, Massachusetts Natural Gas Task Force.

Adjunct Professor, Department of Finance, Babson College; Courses taught include Risk Management (MBA Program), Options and Futures

Instructor/Lecturer, Department of Economics, Northeastern University; Courses taught include Energy Economics, Statistics, International Economics, and Principles of Economics.